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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,642	11/26/2003	Gunther Reissig	MAS-FIN-101	9720
24131	7590	07/27/2007	EXAMINER	
LERNER GREENBERG STEMER LLP			JANAKIRAMAN, NITHYA	
P O BOX 2480			ART UNIT	PAPER NUMBER
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07/27/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/723,642	REISSIG, GUNTHER
	Examiner	Art Unit
	Nithya Janakiraman	2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 07 May 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07 May 2007 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____.
 - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

This action is in response to the submission filed on 5/07/07. Claims 1-20 are presented for examination.

Drawings

1. The drawings were received on 5/07/07. These drawings are acceptable.

Claim Objections

2. Claims 1-20 are objected to because of the following informalities: the equations and amendments thereto interfere with their clarity. It is difficult to determine exactly what is being claimed. Further, should the application eventually issue as a patent, the present form of the equations will hinder the Office's ability to reproduce the equations in the patent. The Examiner respectfully requests a clean listing of the claims including larger and clearer renditions of the equations.

3. Claims 1 is objected to because of the following informalities: usage of the phrase "and/or" (line 3) is vague. It is unclear as to whether which of the three limitations are being recited. Appropriate correction is required.

4. Claims 19 and 20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 19 and 20 recite a medium for the purposes of carrying the instructions of the parent method claim.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
6. Claims 1 and 10 appear to be directed to a recitation of abstract ideas (for example, "providing a system of equations") and mathematical algorithms and further, fail to produce a concrete, useful or tangible result. The claims recite outputting error information, but fail to recite how this error information is "output". Therefore the method does not provide a concrete, useful, or tangible result.
7. Claims 3, 4 and 8 recite "a computer program with computer-executable instructions for executing a method for numerical simulation...", Claims 10-11 recite "a computer program product and computer program...which product is designed in such a way that it is possible to execute a method for providing error information relating to inconsistencies...". These claims appear to be directed to a computer program that lists the expressions of the program, but does not define any structural or functional interrelationship between the computer program and other claims elements of the computer, which permit the computer program's functionality to be realized. MPEP 2106.01 recites the following: "...computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory-processes, as they are not "acts". being performed. Such claimed computer programs do not define any structural and functional .

interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory."

8. Claims 7, 12-15 recite "computer-readable medium" and "a data carrier", however, the specification recites that a "computer-readable medium" may be a "carrier signal for distance communication" (page 31, lines 5-10), therefore, the claims are directed to non-statutory subject matter. Claims that recite nothing but the physical characteristics of a form of energy are nonstatutory natural phenomena, therefore a claim reciting a signal encoded with functional descriptive material does not appear to fall within any statutory category of patentable subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. While claims 8, 9, 19, and 20 are written as dependent claims, they are directed to a separate invention of downloading.

10. Claims 8, 9, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unger et al, in view of Garcia-Sabiro et al (US Patent 6,266,630).
11. Unger et al teaches a computer program with computer-executable instructions for executing the method of analyzing and simulating a differential algebraic system.
12. Unger et al does not expressly teach downloading the computer program from an electronic data network onto a computer connected to the data network wherein the electronic data network is the Internet.
13. Garcia-Sabiro et al teaches providing a designer graphical feedback during the simulation of differential algebraic equations regarding the convergence of solutions for the modeling equations so that the designer is better able to debug the design (column 1, lines 50-59) wherein the program and simulation is performed in a computer system including data processing and storage components that can be interconnected by a network such as the internet, wherein it is understood that the connection of the computer components via the Internet would enable the downloading of the computer program product from the Internet (Figures 1 and 2; column 2, line 60-column 3, line 35).
14. Unger et al and Garcia-Sabiro et al are analogous art since they are both directed to the simulation of a system of differential algebraic equations.
15. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the computer program with computer-executable instructions for executing the method of analyzing and simulating a differential algebraic system as taught in Unger et al to further include the downloading of a computer program from an electronic data network such as the internet since Garcia-Sabiro et al teaches providing a designer graphical feedback during the

simulation of differential algebraic equations regarding the convergence of solutions for the modeling equations so that the designer is better able to debug the design (column 1, lines 50-59).

Response to Arguments: 35 USC § 112

16. Applicant's arguments, see pages 16-20, filed 5/07/07, with respect to claims 1-20 have been fully considered and are persuasive. The rejections of claims 1-20 have been withdrawn.

Response to Arguments: 35 USC § 103

17. Applicant's arguments, see pages 24-30, filed 5/07/07, with respect to claims 1-7, and 10-18 have been fully considered and are persuasive. The rejections of claims 1-7 and 10-18 have been withdrawn. These claims are rejected under 35 U.S.C §101 rejections, and are therefore, not presently allowable.

18. Regarding the rejection of claims 8, 9, 19, and 20 under 35 U.S.C §103 as unpatentable over Unger in view of Garcia-Sabiro, Applicant's remarks attempt to distinguish the invention of claims 1 and 10 over the teachings of Unger. Claims 8 and 19, however, are merely directed to downloading a program to a computer. As would be recognized by a person of ordinary skill in the art of computer data transfer, the intended use of computer data is completely irrelevant to the methods of its transfer. Therefore, distinguishing the *program* being downloaded from the prior art does not create a patentable method of downloading.

19. Any indication of allowable subject matter is withheld pending response to the rejections of claims 1-20.

Response to Arguments: 35 USC § 101

20. Applicant's arguments filed 5/07/07 have been fully considered but they are not persuasive.
21. Claims 1 and 10 appear to be directed towards a recitation of a mathematical algorithm (an abstract idea). Applicant argues that the error information is tangibly output, however, neither the claims nor the specification recite *how* the information is output (for example, is it output to a computer display for use by a user). Therefore, a reasonable interpretation of the term "output" in this application is not limited to a tangible result".
22. Claim 3, though appearing to be in dependent form, explicitly recites "A computer program with computer executable instructions for executing a method...according to claim 1." This claim does not incorporate all of the limitations of the reference claim 1, but rather specifically establishes a separate and distinct invention. That is, claim 1 defines a method, while claim 3 defines a separate and distinct "computer program". A "computer program" is not a method and therefore cannot incorporate method steps from a previous claim.
23. MPEP 2106.01 specifically instructs that:
"Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory."
24. In the present situation, claim 3 clearly and explicitly defines, as a whole, a mere program listing and is therefore nonstatutory.
25. Claims 4, 8, 10, and 11 are subject to similar analysis.

26. Claims 7 and 12-15 recite a “compute-readable medium” (defined on page 31, lines 5-10 as including a “carrier signal for distance communication”) and “a data carrier”. MPEP 2106.01 clearly states:

“When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory.”

27. Claims not specifically mentioned stand rejected by virtue of their dependency.

Conclusion

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

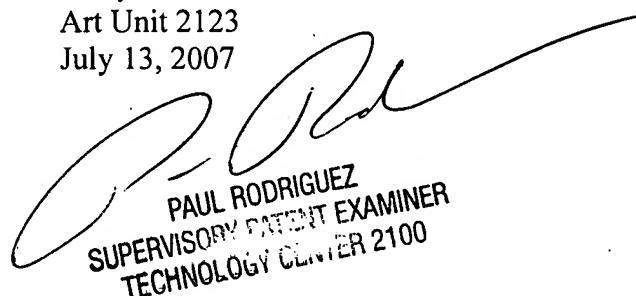
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nithya Janakiraman whose telephone number is 571-270-1003. The examiner can normally be reached on Monday-Thursday, 8:00am-5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on (571)272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nithya Janakiraman
Art Unit 2123
July 13, 2007

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